MAR 0 5 2004 PS

# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

| Application Number     | 09/462,171    |             |
|------------------------|---------------|-------------|
| Filing Date            | July 14, 1998 | RECEIVE     |
| First Named Inventor   | Braun         | TEOLIVE     |
| Group Art Unit         | 2815          | MAR 1 0 200 |
| Examiner Name          | J. Jackson    |             |
| Attorney Docket Number | 201448/321    |             |

|   |   | ENCLOSU  | RES (check all that apply)   |      |   |
|---|---|--|--|------|---|
| Fee Transmittal Form Fee Attached  Amendment / Reply  After Final  Affidavits/declaration(s)  Extension of Time Request  Express Abandonment Request  Information Disclosure States  Certified Copy of Priority Document(s)  Response to Missing Parts/ Incomplete Application  A copy of the Notice to Munder 37 CFR 1.52 or 1.5 | est<br>ment<br>Missing Parts                          | Assignm (for an A  Drawing  Declarat  Licensin  Petition Applicat  Power of Change of Termina  Request | nent Papers (s(s) ion and Power of Attorney g-related Papers to Convert to a Provisional |      | After Allowance Communication to Group Appeal Communication to Board of Appeals and Interferences Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Application Data Sheet Request for Corrected Filing Receipt with Enclosures A self-addressed, prepaid postcard for acknowledging receipt Other Enclosure(s) (please identify below):  PTO-1449 Form with 19 references attached |
|   |   |  | The Commissioner is required or credit any overpabove identified docket num              | ayme | y authorized to charge any additional fees<br>nts to Deposit Account No. 14-1138 for the  |
|   | SIGNATUI  | RE OF APPL   | ICANT, ATTORNEY, O   |      | GENT  |
| Firm<br>or<br>Individual name   | Alice Y. Cl<br>Nixon Peak<br>Clinton Sq<br>Rochester, | hoi<br>body LLP<br>uare, P.O. Bo<br>New York 1<br>(585) 263-1  | ox 31051<br>14603-1051   |      |   |
| Signature   | 4 0   | ice y.   | CC:  |      | Registration No. 45,758   |
| Date  | March 3, 2  | 004  |  |      |   |
|   |   |  | <del> </del>   |      |   |

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|          | transmitted by facsimile on the date shown belo | w to the United States Patent and Trademark Office at |
|----------|---|---|
|          | (703)   | Λ Λ Λ ·   |
| March 3, | 2004  | _ Ruth R. Smith                                       |

Signature

Ruth R. Smith

Typed or printed name

Date

### FEE TRANSMITTAL FOR FY 2004

Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 180

|                      | Complete if K | nown         |
|----------------------|---------------|--------------|
| Application Number   | 09/462,171    |              |
| Filing Date          | July 14, 1998 |              |
| First Named Inventor | Braun         |              |
| Examiner Name        | J. Jackson    | RECEIVED     |
| Art Unit             | 2815          |              |
| Attorney Docket No.  | 201448/321    | MAR 1 0 2004 |

| Check Credit Card Money None None   | 3. A         | DDITIO         | NAL I       |             | EE CALCULATION (continued)   |
|---|--------------|----------------|-------------|-------------|--|
| Order Order   |              |                |             |             |  |
| Deposit Account:  |              | Entity         | L           | Entity      |  |
| Deposit<br>Account<br>Number  | Fee<br>Code  | Fee<br>(\$)    | Fee<br>Code | Fee<br>(\$) | Fee Description  |
| 17-9  | 1051         | 130            | 2051        | 65          | Surcharge – late filing fee or oath  |
| Ex sub  | 1052         | 50             | 2052        | 25          | Surcharge - late provisional filing fee or cover sheet   |
| Deposit Account Nixon Peabody LLP   | 1053         | 130            | 1053        | 130         | Non-English specification  |
| Account Name Nixon Peabody LLP  | 1812         | 2,520          | 1812        | 2,520       | For filing a request for ex parte reexamination  |
| The Commission on its outhonized too (about all that arms)  | 1804         | 920*           | 1804        | 920*        | Requesting publication of SIR prior to Examiner  |
| The Commissioner is authorized to: (check all that apply)  Charge fee(s) indicated below  Credit any overpayments | 1805         | 1,840*         | 1805        | 1,840*      | action Requesting publication of SIR after Examiner  |
| Charge any additional fee(s)  | 1251         | 110            | 2251        |             | action   |
|   | 1251         | 110            | 2251        | 55          | Extension for reply within first month   |
| Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.                 | 1252         | 420            | 2252        | 210         | Extension for reply within second month  |
|   | 1253         | 950            | 2253        | 475<br>740  | Extension for reply within third month   |
| FEE CALCULATION  1. BASIC FILING FEE  | 1254<br>1255 | 1,480<br>2,010 | 2255        | 1,005       | Extension for reply within fourth month  Extension for reply within fifth month                  |
| Large Entity Small Entity   | 1401         | 330            | 2401        | 165         | Notice of Appeal   |
| Fee Fee Fee Fee Description   | 1402         | 330            | 2402        | 165         | Filing a brief in support of an appeal   |
| Code (\$) Code (\$) Fee Paid  | 1402         | 290            | 2402        | 145         | Request for oral hearing   |
| 1001 270 2001 205 11/11/15/17 6   | 1451         | 1,510          | 1451        | 1,510       | Petition to institute a public use proceeding  |
| 1001 770 2001 385 Utility filing fee<br>1002 340 2002 170 Design filing fee                                       | 1452         | 110            | 2452        | 55          | Petition to revive – unavoidable   |
| 1003 530 2003 265 Plant filing fee  | 1453         | 1,330          | 2453        | 665         | Petition to revive – unintentional   |
|   | 1501         | 1,330          | 2501        | 665         | Utility issue fee (or reissue)   |
| 1004 · 770 2004 385 Reissue filing fee<br>1005 160 2005 80 Provisional filing fee                                 | 1502         | 480            | 2502        | 240         | Design issue fee   |
| 1005 100 2005 00 Hovisional liming lee  | 1503         | 640            | 2503        | 320         | Plant issue fee  |
| SUBTOTAL (1) $(\$)$ 0   | 1460         | 130            | 1460        | 130         | Petitions to the Commissioner  |
|   | 1807         | 50             | 1807        | 50          | Processing fee under 37 CFR 1.17(q)  |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE   | 1806         | 180            | 1806        | 180         | Submission of Information Disclosure Stmt 180  |
| Fee from  | 8021         | 40             | 8021        | 40          | Recording each patent assignment per property  |
| Total Claims below Fee Paid  -20** = X = 0  | 1809         | 770            | 2809        | 385         | (times number of properties) Filing a submission after final rejection (37 CFR 1.129(a))         |
| Independent3** = X = 0  | 1810         | 770            | 2810        | 385         | For each additional invention to be examined (37 CFR 1.129(b))                                   |
| Multiple Dependent X = 0  | 1801         | 770            | 2801        | 385         | Request for Continued Examination (RCE)  |
| Large Entity Small Entity<br>Fee Fee Fee Fee <u>Fee Description</u>   | 1802         | 900            | 1802        | 900         | Request for expedited examination of a design application  |
| Code (\$)   | Other        | fee (specif    | fy)         |             |  |
| 1202 18 2202 9 Claims in excess of 20   |              |                |             |             |  |
| 1201 86 2201 43 Independent claims in excess of 3   | *Pad         | ced by Do      | eic Filin   | g Fee Paid  | SUBTOTAL (3) (\$) 180  |
| 1203 290 2203 145 Multiple dependent claim, if not paid   | , can        | ccu oy Da      | SIC FIIII   | g ree raid  | SUBICIAL (5) (3) 100   |
| 1204 86 2204 43 ** Reissue independent claims over  | ĺ            | (              | CERTIF      | ICATE OF    | MAILING OR TRANSMISSION [37 CFR 1.8(a)]  |
| original patent  1205 18 2205 9 ** Reissue claims in excess of 20 and   | I hereb      |                |             |             | ence is being:   |
| over original patent  |              |                |             |             | nited States Postal Service on the date shown below with sufficient                              |
| SUBTOTAL (2) (\$) 0   |              |                |             |             | mail in an envelope addressed to: Mail Stop,<br>tents, P. O. Box 1450, Alexandria, VA 22313-1450 |
| **or number previously paid, if greater; For Reissues, see above  |              |                |             |             | ile on the date shown below to the United States Patent and                                      |
| j   |              | Tr             | ademark     | Office at ( | (703)  |
|   | Marc         | h 3, 2004      |             |             | Ruth R. Smith  |
|   |              | Date           | t           |             | SignatureRuth R, Smith   |
|   |              |                |             |             | Typed or printed name  |
| SUBMITTED BY  |              |                |             |             | Complete (if applicable)   |
| Alice Y Choi  | _            | ration No      |             | 45,758      | (585) 263-1508   |
| Name (Print/Type)   | (Attori      | ney/Agen       | <i>t)</i>   |             | 1 elephone   |
| Signature Alice Gel.  |              |                |             |             | Date March 3, 2004   |



PATENT Docket No.: 201448/321

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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| Applicant(s) | : | Braun et al.  | • | aminer:<br>Jackson | MAR 1 0 2004 |
|--------------|---|---|---|--------------------|--------------|
| Serial No.   | : | 09/462,171  | ) | rt Unit:           |              |
| Cnfrm. No.   | : | 4753  | , | 2815               |              |
| Filed        | : | July 14, 1998   | ) |                    |              |
| For          | : | MICROELECTRONIC COMPONENTS AND ELECTRONIC NETWORKS COMPRISING DNA | ) |                    |              |

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.97-1.98

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Dear Sir:

Pursuant to 37 CFR §§ 1.97-1.98, applicants hereby bring to the attention of the United States Patent and Trademark Office, the enclosed references listed on the attached PTO-1449 form.

Pursuant to 37 CFR §§ 1.17(p) and 1.97(c), enclosed is a check to cover the \$180.00 filing fee. The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment, to Deposit Account No. 14-1138.

03/09/2004.WABDELR1.00000148:09462171

01 FC:1806

180.00 OP

Respectfully submitted,

Date: March 3, 2004

Alice Y. Choi

Registration No. 45,758

NIXON PEABODY LLP

Clinton Square, P.O. Box 31051 Rochester, New York 14603-1051

Telephone: (585) 263-1508 Facsimile: (585) 263-1600

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

|                       |              |  | U.S. PATENT DOC                | CUMENTS  |  |
|-----------------------|--------------|--|--------------------------------|--|--|
| Examiner<br>Initials* | Cite<br>No.¹ | U.S. Patent Document  Number - Kind Code <sup>2</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where Relevant<br>Passages or Relevant Figures Appear |
|                       | 1            | US-5,561,043   | 10/01/1996                     | Cantor et al.                                      |  |
|                       | 2            | US-5,705,348   | 01/06/1998                     | Meade et al.                                       |  |
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|                       | 4            | US-5,948,897   | 09/07/1999                     | Sen et al.   |  |
| ,                     | 5            | US-5,952,172   | 09/14/1999                     | Meade et al.                                       |  |
|                       | 6            | US-5,965,133   | 10/12/1999                     | Cantor et al.                                      |  |
|                       | 7            | US-5,985,550   | 11/16/1999                     | Goodman et al.                                     |  |
|                       | 8            | US-6,013,170   | 01/11/2000                     | Meade  |  |
|                       | 9            | US-6,087,100   | 07/11/2000                     | Meade et al.                                       |  |
|                       | 10           | US-6,248,529   | 06/19/2001                     | Connolly   |  |
|                       | 11           | US-6,291,188   | 09/18/2001                     | Meade et al.                                       |  |
| `                     |              | US-  |                                |  |  |
|                       |              | US-  |                                | -  |  |
|                       |              | US-  |                                |  |  |
|                       |              | US-  |                                |  |  |

| FOREIGN PATENT DOCUMENTS |                          |  |                                |  |   |    |  |  |
|--------------------------|--------------------------|--|--------------------------------|--|---|----|--|--|
| Examiner<br>Initials*    | Cite<br>No. <sup>1</sup> | Foreign Patent Document  Kind Code <sup>3</sup> Country Code <sup>3</sup> Number <sup>4</sup> (If known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear | T⁵ |  |  |
|                          | 12                       | WO 95/20320  | 08/03/1995                     | WIPO   |   |    |  |  |
| _                        | 13                       | WO 96/30508  | 10/03/1996                     | WIPO   |   |    |  |  |
|                          |                          |  |                                | *  |   |    |  |  |
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| Examiner  | —————————————————————————————————————— | Date       |  |
|-----------|--|------------|--|
| Signature |  | Considered |  |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Complete if Known ute for form 1449B/PTO 09/462,171 Application Number INFORMATION DISCLOSURE July 14, 1998 Filing Date

STATEMENT BY APPLICANT

Braun First Named Inventor (use as many sheets as necessary) 2815 Group Art Unit J. Jackson Examiner Name Sheet of Attorney Docket Number 201448/321

| Examiner  | Cite   | Include name of the outbor (in CAPITAL LETTERS) title of the outbol (suban approximate) title of the   | 1  |
|---|--|--|--|
| Initials*   | No.1   | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.)., date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup>                                   |
|   | 14   | Eichen et al., "Self-Assembly of Nanoelectronic Components and Circuits Using  |  |
|   | 1  | Biological Templates," Acta Polymerica 49: 663-670 (1998) (abstract)   |  |
|   | 15   | Di Mauro et al., "DNA Technology in Chip Construction," Advanced Materials   |  |
|   |  | 5: 384-386 (1993) (abstract)   | 1  |
|   | 16   | Niemeyer, "DNA as a Material for Nanotechnology; DNA Chip, Biochip   |  |
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|   | 17   | Niemeyer, "DNA Organization in Materials for the Nano-Technology," Angew.  |  |
|   | -  | Chem. 109: 603-606 (1997) (abstract)   | 1  |
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|   |  | Chemical & Engineering News 74: 6 (1996)   | 1  |
|   | 19   | Wilkinson, "DNA Enables Nanoconstruction," Chemical & Engineering News 76: 18  | ,  |
|   |  | (1998)   |  |
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| Examiner<br>Signature | Date<br>Considered |  |
|-----------------------|--------------------|--|
| Signature             | <br>Considered     |  |

<sup>\*</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.